

## CORE CONFIGURATION FOR A NUCLEAR REACTOR

### ABSTRACT OF THE DISCLOSURE

In an embodiment of the present invention, the core of a nuclear reactor includes a plurality of fuel cells and a plurality of large control rods. Each large control rod is about two times the width of a conventional control rod and includes four control rod blades extending radially from a central portion and arranged at right angles to each other. The blades define four fuel bundle receiving channels. The core is configured so that the control rods are arranged in a plurality of staggered rows with four fuel bundles in each receiving channel.

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